

40

Date: Tuesday, 8/28/2007 3:22:34 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BEARPAW KIT (23"X19")
Job Number : 34302	
Estimate Number : 12023	
P.O. Number : <i>N/A</i>	Part Number : D900619011
This Issue : 8/28/2007 S.O. No. : <i>N/A</i>	Drawing Number : D2421 REV F2
Prsht Rev. : <i>NC</i>	Project Number : <i>N/A</i>
First Issue : <i>N/A</i>	Drawing Revision : F2
Previous Run : <i>N/A</i>	Material : <i>N/A</i>
Written By : <i>[Signature]</i>	Due Date : 9/30/2007 Qty: 4 Um: Each
Checked & Approved By : <i>[Signature]</i>	
Comment : Est .C 04.02.17 Blank size changed on Step 3 KJ/JLM	
Est Rev:D Was k10010 07-01-03 JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D900-619-011 CHG003

E 07/10/18

2.0	MUHMWB10	UHMW 1" Black
-----	----------	---------------



Comment: Qty.: 6.8404 sf(s)/Unit Total : 27.3617 sf(s)

Cut 2 blanks per (1) K10010 Kit

Cut blank: 19.50" x 23.50" x 1.00" thick (+0.030/-0.000) per DSK086-4

Material: Black UHMW 1"

(MUHMWB10)

Batch: *M105863**J.F. 07/10/17*

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

Note:(2) bearpaws for (1) Kit

1-Inspect material for defects or damage prior to machining

2-Machine as per Folio FA124 and Dwg D2421

Identify as D2421

3-Deburr

J.F. 07/10/17

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.F. 07/10/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARPAW KIT (23"X19")

Job Number: 34302

Part Number: D900619011

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

LF 07/10/18 (4)

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Pick Packing Kit

7.0

D2182B060

Rubber Cushion



Comment: Qty.: 4.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 D2182B050

Rubber Cushion

1332872

28042

1324870

8.0

D2274

Radius Block



Comment: Qty.: 8.0000 Each(s)/Unit Total : 32.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 D2274

Radius Block

1332015

50

9.0

D2519

Clamp



Comment: Qty.: 4.0000 Each(s)/Unit Total : 16.0000 Each(s)

Clamp

Pick: Packing Kit

(Note: D2421 is on the BOM as material from step 3)

Qty Part Number Description Batch

4 D2519

Clamp

1326216

50

10.0

D2529

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 32.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 D2529

Washer

1332025

7/10/18 50

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 8/28/2007 3:22:34 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARPAW KIT (23"X19")

Job Number: 34302

Part Number: D900619011

Job Number:



Seq. #:

Machine Or Operation:

Description :

HT 11.0

AN415A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 32.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 AN4-15A

Bolt

*
M104022

SP

HT 12.0

AN960JD416

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 32.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 AN960JD416

Washer

M103338

SP

HT 13.0

MS21042L4

Nut



Comment: Qty.: 8.0000 Each(s)/Unit Total : 32.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 MS21042L4

Nut (or -4)

M104683

SP

HT 14.0

QS100M24S

Clamp



Comment: Qty.: 4.0000 Each(s)/Unit Total : 16.0000 Each(s)

Clamp

Pick: Packing Kit

(Note: D2421 is on the BOM as material from step 3)

Qty Part Number Description Batch

4 QS100M24S Clamp

M103641

M105568

1 Paperwork package from Step 2

7/10/18 (4x) SP

15.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

SP 2/10/18 (4x)

16.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D900-619-011

Location:

DART + 2/10/18 (4x)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: D Date: 09/10/19
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 8/28/2007 3:22:34 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARPAW KIT (23"X19")

Job Number: 34302

Part Number: D900619011

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

QC21

FINAL INSPECTION/W/O RELEASE



(4)

Comment: FINAL INSPECTION/W/O RELEASE

LD 07/10/17

Job Completion



U 07-10-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	34302
Description: Bearpaw		Part Number:	D2421
Inspection Dwg: D2421 Rev: F2		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST




☒ First Article ☐ Prototype

Inspection Sheet Drawing Dimension		Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	0.20	+/-0.030	.197"	✓			
B	0.95	+/-0.030	.953"	✓			
C	0.45	+/-0.010	.448"	✓			
D	0.07 x 45°	+0.030/-0.010	.070" x 45°	✓			
E	0.69	+/-0.030	.691"	✓			
F	0.38	+/-0.010	.380"	✓			
G	0.44 - 0.47	+/-0.000	.450"	✓			
H	R0.25	+/-0.030	R0.250"	✓			
I	0.19 x 45°	+/-0.030	.191"	✓			
J	23.00	+/-0.030	23.000"	✓			
K	Ø0.260	+0.005/-0.000	Ø.260"	✓			
L	Ø0.93	+/-0.030	Ø.925"	✓			
M	0.30	+/-0.030	.319"	✓			
N	4.50	+/-0.030	4.500"	✓			
O	9.50	+/-0.030	9.50"	✓			
P	1.00	+/-0.030	0.999"	✓			
Q	14.750	+/-0.010	14.750"	✓			
R	0.38	+/-0.030	.380"	✓			
S	4.54	+/-0.010	4.543"	✓			
T	19.00	+/-0.030	19.00"	✓			

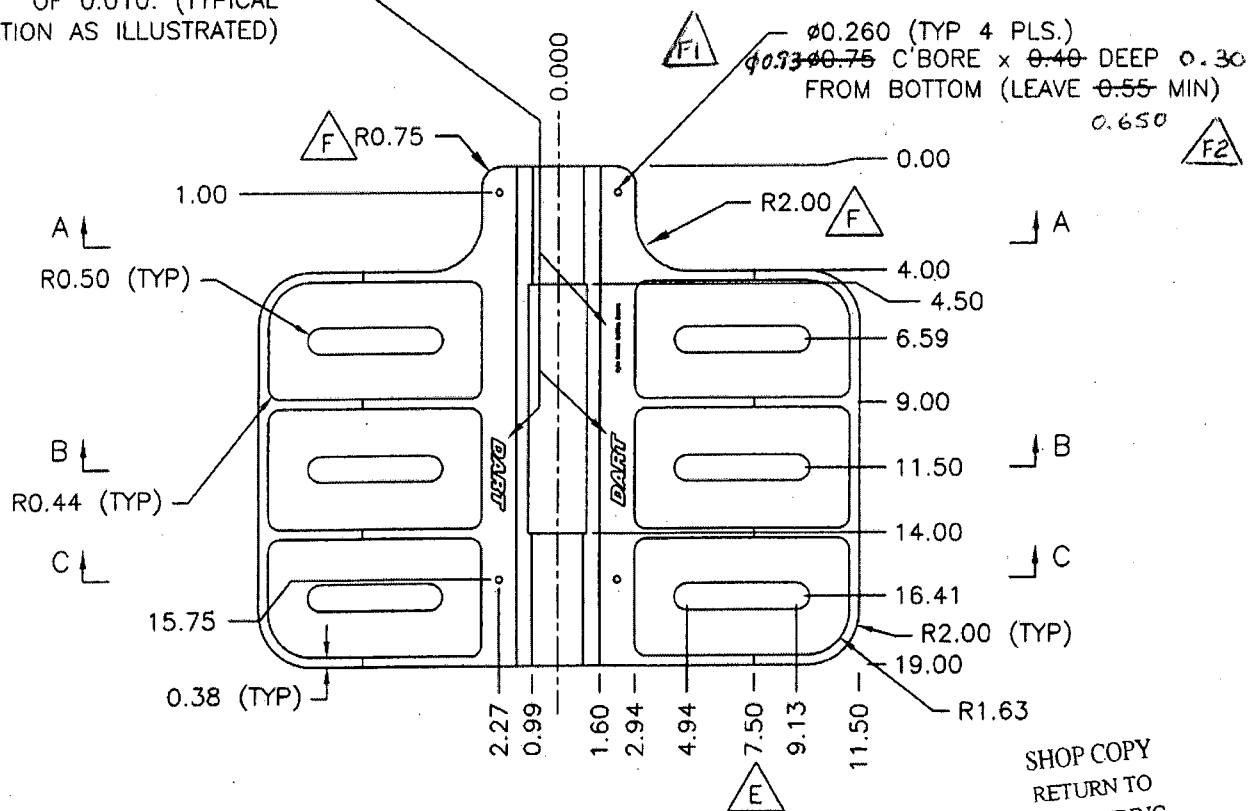
Measured by: J.F.	Audited by: J.S.	Prototype Approval:	N/A
Date: 07/10/17	Date: 07/10/17	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O K10010	KJ/RF	
B	04.11.29	Revised dimension M	KJ/JLM	



DESIGN 		DRAWN BY 		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED RF		APPROVED 		DRAWING NO. D2421	
DATE 01.03.12		TITLE BEARPAW		REV. F SHEET 1 OF 2	
A	95.04.24	NEW ISSUE			
B	95.11.28	CHANGED NUMBER OF HOLES			
C	97.06.19	ADDED MATERIAL SPECIFICATION			
D	98.08.11	DIM MODIFICATIONS			
E	00.03.01	R1.77 WAS R2.66; ADD R1.85 BORE RELIEF FOR CLAMPS; ADDED DEO 9155			
F	01.03.12	MODIFY FWD END			
F1	RF 03.01.13	Ø 0.93 WAS Ø 0.75; R0.19 WAS R0.38; 0.19 WAS 0.25			
F2	RF 04.11.03	0.30 WAS 0.40 ; 0.650 WAS 0.55			

ENGRAVE DART LOGO TO
MAX DEPTH OF 0.012.
ENGRAVE PART AND BATCH
NUMBERS TO MAX DEPTH
OF 0.010. (TYPICAL
LOCATION AS ILLUSTRATED)



SYMMETRIC ABOUT CENTER LINE

MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689,
1.00" THICK (MACHINE TO 0.950)

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RETURN TO
ENGINEERING
UNCONTROLLED COPY
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WITHOUT NOTICE
WORK ORDER
NO. 34302

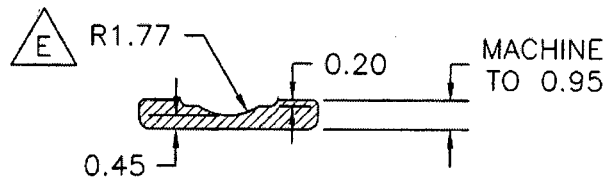
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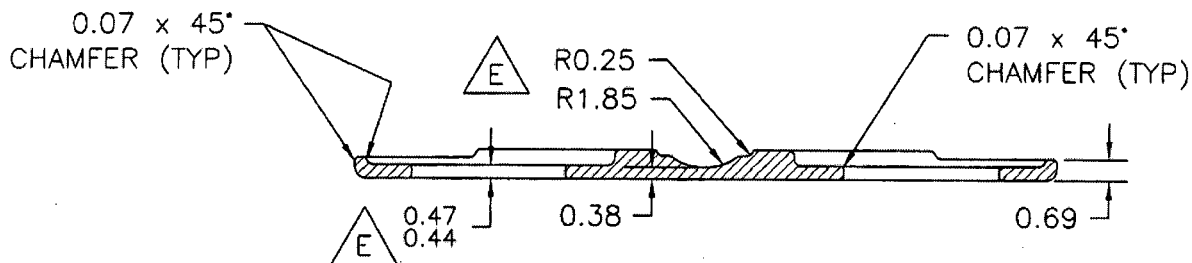


DESIGN [Signature]	DRAWN BY [Signature]	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED RF	APPROVED [Signature]	DRAWING NO. D2421	REV. F SHEET 2 OF 2
DATE 01.03.12		TITLE BEARPAW	SCALE 1:6

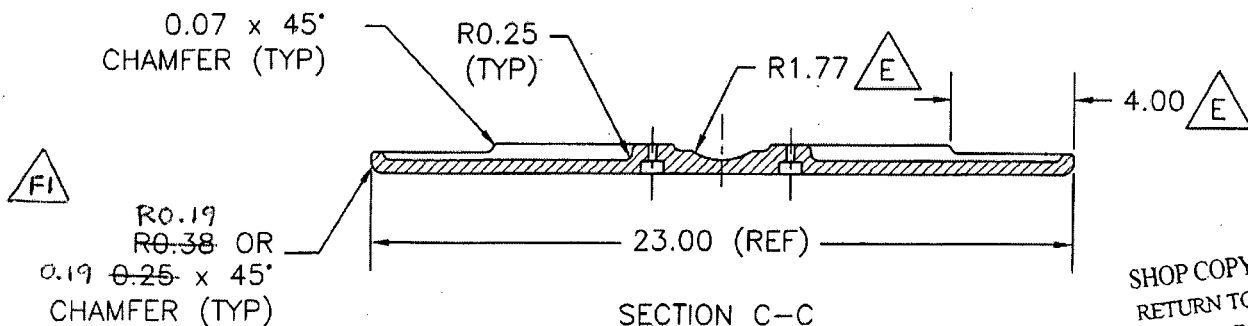
RELEASED
01.03.14 #



SECTION A-A



SECTION B-B



SECTION C-C

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WORK ORDER
NO. 34302

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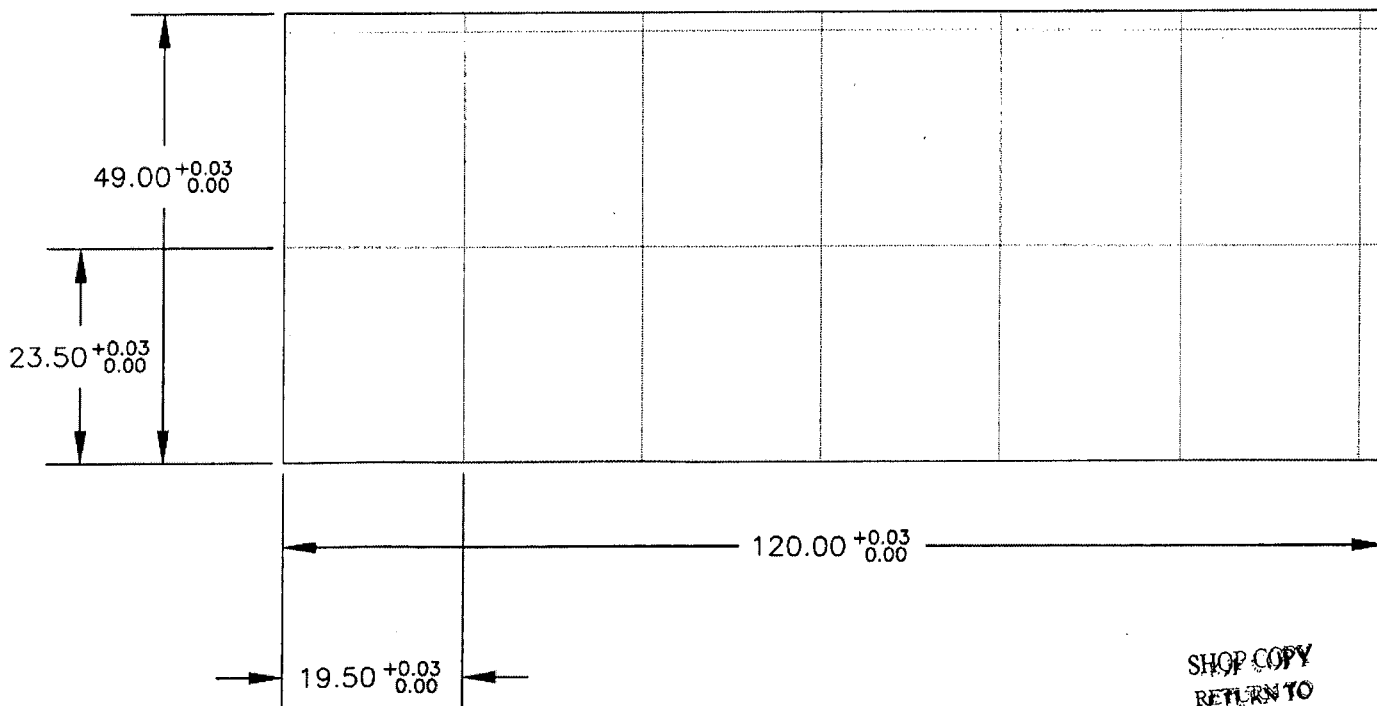
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DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. DSK-086-4	REV. A SHEET 1 OF 1
DATE 04.02.17		TITLE BEARPAW BLANKS	SCALE 1:20
A	04.02.17	NEW ISSUE	

RELEASED
04.02.19

D2421 BEARPAW BLANKS
CUTTING DIAGRAM



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NO. 34302

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Process Sheet

Date: Tuesday, 8/28/2007 3:22:34 PM
 User: Kim Johnston

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: BEARPAW KIT (23"X19")
Job Number	: 34302		
Estimate Number	: 12023		
P.O. Number	:	Part Number	: D900619011
This Issue	: 8/28/2007 S.O. No. :	Drawing Number	: D2421 REV F2
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : MACHINED PARTS	Drawing Revision	: F2
Previous Run	:	Material	:
Written By	: <u>07.08.28</u>	Due Date	: 9/30/2007 Qty: 4 Um: Each
Checked & Approved By	: <u>07.08.28</u>		
Comment	: Est .C 04.02.17 Blank size changed on Step 3 KJ/JLM Est Rev:D Was k10010 07-01-03 JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
-----	----	------------------



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D900-619-011 CHG003

07.09.12

2.0	MUHMWB10	UHMW 1" Black
-----	----------	---------------



Comment: Qty.: 6.8404 sf(s)/Unit Total : 27.3617 sf(s)

Cut 2 blanks per (1) K10010 Kit

Cut blank: 19.50" x 23.50" x 1.00" thick (+0.030/-0.000) per DSK086-4

Material: Black UHMW 1"

(MUHMWB10)

Batch: _____

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
-----	-------	--------------------------------



Comment: HAAS CNC VERTICAL MACHINING #1

Note:(2) bearpaws for (1) Kit

REFERENCE ONLY

1-Inspect material for defects or damage prior to machining

2-Machine as per Folio FA124 and Dwg D2421

Identify as D2421

3-Deburr

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE